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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: INSECTICIDAL COMPOSITIONS

(57) Abstract: Insecticidal compositions are described comprising an essential oil obtained from a plant selected from the genera *Salvia*, *Artemisia*, *Citrus*, *Juniperus*, *Laurus*, *Myristica*, *Origanum*, *Piper* or *Aloysia*. The essential oil may be in a gel carrier, an aqueous alcoholic vehicle or a vehicle based on an alcohol/vegetable oil mixture. The compositions are particularly useful for ridding humans and animals of parasitic infestations such as lice and mites as well as for treatment of furnishings, clothing and plants.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A01N65/00 A01N25/04 A01N25/02 A61K35/78 A61K7/40

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A01N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EP0-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CH 688 787 A (LINSIG DIETER ; RICHLI THOMAS (CH)) 31 March 1998 (1998-03-31) column 2, line 4, 15-42, 60 column 3, line 6-14, 18, 19, 34-37; example 2 ---	1-39, 52-57
P, X	WO 00 00213 A (ARBOR VIDA NATURAL PRODUCTS ; WOLFF RICKI DE (US)) 6 January 2000 (2000-01-06) cited in the application page 2, line 14-24 page 3, line 3 - page 4, line 28 page 5, line 1 - page 6, line 2; table 1 --- -/--	20-39, 52-57

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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INTERNATIONAL SEARCH REPORT

Inter. ... Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	EP 0 495 684 A (CLILCO LTD) 22 July 1992 (1992-07-22) cited in the application see: page 2, line 44-50; page 3, line 48-56; page 4, line 11 - 13; page 7, line 47/48. ---	1-5, 7-9, 11, 12, 20-25, 28, 33, 34, 38, 39, 53-57
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>C. REGNAULT-ROGER ET AL.: "Insecticidal effect of essential oils from mediterranean plants upon Acanthoscelides obtectus say (Coleoptera, Bruchidae), a pest of kidney bean." J. CHEM. ECOLOGY, vol. 19, no. 6, 1993, pages 1233-1244, XP000940842 see: 'Discussion' and Table 1.</p>	53-57

INTERNATIONAL SEARCH REPORT

International application No.
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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

1-19, 33, 34, 38-57
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-19, 33 (partly), 34 (partly)

A composition for use in the treatment of a human or animal having a parasitic insect infestation comprising an essential oil obtained from a plant selected from the genera Artemisia, Citrus, Juniperus, Laurus, Myristica, Origanum, Piper or Aloysia in a gel carrier.

Use of a gel and essential oil as defined above in the manufacture of a composition for the treatment of a human or animal having a parasitic insect infestation.

A method of treating a human or animal suffering from a parasitic insect infestation by applying a composition as defined hereabove.

2. Claims: 20, 21, 29, 30 (partly), 33 - 37 (all partly),
52 (partly)

A composition for use in the treatment of a human or animal having a parasitic insect infestation comprising an essential oil obtained from a plant selected from the genera Artemisia, Citrus, Juniperus, Laurus, Myristica, Origanum, Piper or Aloysia in an aqueous alcoholic vehicle comprising from 0.1% - 20% v/v alcohol with water.

Use of a composition as defined above in the manufacture of a composition for the treatment of a human or animal having a parasitic insect infestation.

Method of treating a human or animal suffering from a parasitic insect infestation by applying the composition defined hereabove.

Method suitable for treating furnishing, clothing or plants to kill parasitic insects by applying the composition defined hereabove.

3. Claims: 22-28, 30 (partly), 31, 32, 33 - 37 (all partly),
52 (partly)

A composition for use in the treatment of a human or animal having a parasitic insect infestation comprising an essential oil obtained from a plant selected from the genera Artemisia, Citrus, Juniperus, Laurus, Myristica, Origanum, Piper or Aloysia in an alcohol/vegetable oil mixture comprising from 0.1% - 20% v/v alcohol.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Use of a composition as defined above in the manufacture of a composition for the treatment of a human or animal having a parasitic insect infestation.

Method of treating a human or animal suffering from a parasitic insect infestation by applying the composition defined hereabove.

Method suitable for treating furnishing, clothing or plants to kill parasitic insects by applying the composition defined hereabove.

4. Claims: 38, 39, 52 (partly)

Composition comprising an essential oil obtained from a plant selected from the genera Petergonium, Cymbopogan, Pimpinella, Myrtus (Cretian, Moroccan, organe), Lavandula, Pinus, Melaleuca, Cinnamomum, Apium, Thymus, Hyssopus, Rosmellus, Cananga, Mentle, Eucalyptus or Vitex in a gel carrier.

Method for treating plants to kill insects by applying this composition.

5. Claims: 40- 51, 52 (partly)

Composition comprising the alkaloid galanthamine for use in the treatment of a human or animal having a parasitic insect infestation.

Use of galanthamine or an extract of Narcissus in the manufacture of a composition for treating a human or animal suffering from a parasitic insect infestation.

Method of treating a human or animal suffering from a parasitic insect infestation by applying the composition defined hereabove.

Method suitable for treating furnishing, clothing or plants to kill parasitic insects by applying the composition defined hereabove.

6. Claims: 53 - 57

Composition comprising a gel carrier and one or more of the terpenes and terpenoids shown to have insecticidal activity for use in treating humans, animals, clothing, furnishing and plants (preferably selected from sabinene, p-cymene, beta-pinene, myrcene, limonene and terpinen-4-ol).

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 00/01589

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